ORIGINAL ARTICLE

It's not You, it's Me: Experiences with Ghosting on Mobile Dating Applications and Belgian Emerging Adults' Self-Esteem

Femke Konings[1] · Sindy Sumter[2] · Laura Vandenbosch[1]

Abstract

Mobile dating applications (MDAs) are popular relationship-seeking tools among emerging adults. As offline relationship dynamics are increasingly mirrored in the context of mobile dating, MDA users are also known to experience online romantic rejection, including ghosting. The consequences of such online romantic rejection and its underlying mechanisms are still unclear. As such, the present study explored the associations between being ghosted on an MDA and emerging adults' self-esteem, by drawing on the Disillusionment model and the Expectancy Violations Theory. Cross-sectional data were gathered through the dissemination of an online survey during April 2021 in Belgium. The analytical sample consisted of 268 Belgian respondents (Mage = 23.17, female = 68.7%). Hypotheses were tested through multivariate linear regression analyses using Hayes' PROCESS Macro. Results indicated that being ghosted on an MDA was indirectly related to decreased self-esteem, through disillusionment with one's own romantic appeal, if the ghosting was experienced as a highly unexpected, negative and impactful event. Given that ghosting seems to become increasingly prevalent, one can wonder what the cumulative impact of being ghosted on an MDA may be on users' self-esteem if they remain active MDA users for a longer period of time. Hence, future research should examine these associations longitudinally. Moreover, future research is encouraged to explore potential interacting individual differences (e.g., self-perceived dating app success) and specific interpersonal communication dynamics (e.g., frequency of communicating).

Keywords Mobile dating applications · Ghosting · Self-esteem · Emerging adulthood

✉ Femke Konings
femke.konings@kuleuven.be

Extended author information available on the last page of the article

Introduction

A key developmental goal of emerging adulthood (18–30 years old) is the establishment of a committed romantic relationship (Arnett, 2000). In the process of achieving this goal, emerging adults typically engage in romantic explorative behaviors (e.g., dating). In recent years, emerging adults started using digital platforms to engage in such behaviors which has, arguably, reshaped the initial formation processes of romantic relationships (Van De Wiele & Campbell, 2019). In particular, Mobile Dating Applications (e.g., Tinder, henceforth: MDAs) are popular platforms for relationship-seeking. MDAs are location-based, real-time, picture-driven platforms which enable emerging adults to effortlessly swipe through a seemingly endless pool of available potential romantic partners and to interact with others nearby. Hence, MDAs enable their users to interact with potential partners who they have never met face-to-face and with whom they do not have any pre-existing social ties (e.g., mutual friends; Birnholtz et al., 2014). On the one hand, the affordances of MDAs seem to facilitate relationship initiation by connecting MDA users with potential partners nearby thereby supporting emerging adults' relationship development (e.g., Strugo & Muise, 2019). At the same time, some scholars argue that MDAs' affordances have transformed modern courtship into an impersonal commodified game which could hinder emerging adults' relationship development (e.g., Hobbs et al., 2017).

The gamification of dating is believed to decrease individuals' attached worth or commitment regarding these new relationships and hence, to expedite relationship dissolution (Van De Wiele & Campbell, 2019). Researchers distinguish between two relationship dissolution strategies, namely avoidance versus open confrontation (e.g., Baxter, 1982). In comparison to more open confrontation strategies (e.g., verbal confrontation), avoidance tends to be perceived negatively by recipients and has been related to negative wellbeing outcomes (e.g., distress, sadness, Collins & Gilliath, 2012). An extreme version of avoidance is the practice of ghosting (Freedman et al., 2022). Ghosting is a way that people can end a relationship by suddenly ignoring or ceasing communication with the other person (Kay & Courtice, 2022). It has been argued that the practice of ghosting is facilitated in an online context through the unique affordances of Computer-Mediated-Communication (CMC). More precisely, interactions in an online setting are thought to be more anonymous, malleable (LeFebvre, 2017) and less inhibited (Suler, 2004). Moreover, recent research indicates that the practice of ghosting is a commonly used rejection strategy in the context of mobile dating (e.g., Van De Wiele & Campbell, 2019; Timmermans et al., 2021). Preliminary findings of Timmermans and colleagues (2021) suggest that being ghosted on a MDA is perceived as painful which may decrease users' self-esteem. Given the importance of resilience after negative interpersonal experiences (e.g., Brechan & Kvalem, 2015), it seems pivotal to broaden current understandings of MDA ghosting and individuals' self-esteem. For this reason, the current study systematically tests whether being ghosted on MDAs negatively relates to individuals' self-esteem while taking into account the transferability of the assumptions of the

Disillusionment Theory (Burgoon & Jones, 1976) and the Expectancy Violations Theory (Afifi & Metts, 1998).

Romantic Identity Exploration and Self-Esteem in Emerging Adulthood

The construction of a romantic identity is a critical developmental process during emerging adulthood (18–30 years old; Arnett, 2000). Emerging adults typically participate in romantic explorative behaviors as part of their identity development; in ascending order towards more commitment/intimacy, they tend to engage in hookups (e.g., Garcia & Reiber, 2008), serial monogamy (i.e., a series of exclusive love relationships, usually including sex; Arnett, 2000) or cohabitation (e.g., Arnett & Schwab, 2012). These different romantic explorative behaviors offer emerging adults the opportunity to attain a sense of themselves as a romantic partner and of what they value in a future long-term intimate relationship (i.e., romantic identity). Moreover, these behaviors are believed to allow emerging adults to acquire the capacity to engage in a supportive, caring relationship, while maintaining their autonomy (i.e., intimacy; Montgomery, 2005). In line with these assumptions, research showed that engaging in romantic explorative behaviors resulted in positively appraised experiences (e.g., spending enjoyable time together with a partner; Blumenstock et al., 2022). The absence or presence of such positive romantic experiences may alter emerging adults' trajectories towards success in their subsequent romantic development (i.e., adulthood; Nelson, 2021).

Besides positive outcomes, some romantic explorative behaviors may turn into negative romantic experiences, which may disrupt emerging adults' developmental trajectories (Nelson, 2021). Negative romantic experiences, including rejection by romantic partners, may be challenging and potentially result in detrimental outcomes on emerging adults' well-being (e.g., George & van den Berg, 2012). In particular, research on traditional offline relationship dynamics has linked the experience of romantic rejection to several psychologically distressing outcomes, including lowered general self-esteem (e.g., Luciano & Orth, 2017). Self-esteem has been referred to as the subjective evaluation of one's worth as a person and includes feelings of accepting and respecting oneself. Explicating the impact of romantic rejection on self-esteem is crucial, as self-esteem is an important predictor for individuals' mental (e.g., depression, anxiety; Sowislo & Orth, 2013) as well as physical health (e.g., disordered eating; e.g., Brechan & Kvalem, 2015). Research has demonstrated that online relationship experiences mirror offline relationship experiences to some extent (e.g., Lefebvre et al., 2019). However, currently empirical support on the correlates of online romantic rejection is lacking. A unique online context in which individuals are likely to experience romantic events is the realm of mobile dating.

Mobile Dating and Romantic Identity Exploration

In recent years, mobile dating has gained popularity among emerging adults (Smith & Anderson, 2016). This new mode of romantic identity exploration transforms the

development of emerging adults' romantic identity because of at least four unique affordances of MDAs. First, the portability of smartphones allows individuals to use MDAs at any time and place. Second, MDAs present their users a seemingly unlimited pool of potential dating partners who are readily available (i.e., availability). Third, MDAs apply geolocation-based matchmaking (GPS), which enables users to swipe through nearby available partners (i.e., locatability; e.g., Lefebvre & Fan, 2020). Lastly, MDAs use a photo-driven design to present potential partners (i.e., multimediality; Timmermans et al., 2021). Hence, the selection-procedure is predominantly based on visual cues, which allows users to make time-efficient, peripheral decisions (i.e., cognitively low-demanding) by liking or rejecting others (Sumter & Vandenbosch, 2019). To summarize, the aforementioned affordances enable MDA users to be permanently available to potential partners.

Following the mobile connectivity paradox (Vanden Abeele, 2021), it is argued that these affordances do not only offer opportunities but also challenges for individuals romantic development. More precisely, mobile media applications are often used and experienced in ambiguous ways (e.g., Hanson, 2021) and, accordingly, may result in both positive and negative outcomes for individuals' (digital) well-being (e.g., Schneider et al., 2021). In the realm of mobile dating, scholars argue that MDAs' unique affordances enable users to easily form connections with others, but also facilitate easy withdrawal from such newly established connections (LeFebvre, 2017). Studies have indicated that one of individuals' main motivations for using MDAs is for entertainment purposes (e.g., Sumter & Vandenbosch, 2019; Timmermans & De Caluwé, 2017). Hence, it has been argued that the affordances of MDAs in particular have transformed modern courtship into a commodified game (e.g., Hobbs et al., 2017). MDAs' peripheral appearance-based swipe-logic may result in seeing other MDA-users as depersonalized, disposable commodities. Users who perceive mobile dating as a form of entertainment may emotionally distance themselves from other users and invest less in meaningful dating relationships (Krüger & Spilde, 2020). In addition, the asynchronous communication, relative anonymity and absence of face-to-face contact in the virtual space enable users to covertly withdraw from others (Van De Wiele & Campbell, 2019).

The practice of ghosting is a severe form of avoidance-based relationship dissolution (Freedman et al., 2022). More precisely, the practice of ghosting refers to abruptly ignoring or stopping communication with the other person in order to end a relationship (Kay & Courtice, 2022). It has been argued that remaining unresponsive or communicatively unavailable is facilitated through the affordances of Computer-Mediated-Communication (CMC; e.g., blocking, deleting matches), which may be done to simplify what can be a difficult, painful and stressful process of romantic withdrawal (Tom Tong & Walther, 2011).

According to recent studies, ghosting is indeed becoming a prevailing rejection tactic in the realm of mobile dating (e.g., Van De Wiele & Campbell, 2019; Timmermans et al., 2021). In general, ghosting prevalence rates in offline dating contexts seem to be increasing over the years. In 2014, 13% (Moore, 2014) reported to have ever been ghosted by a partner, whereas this rate was risen to 72% in 2019 (Koessler et al., 2019). The rates further increased from 11% (Moore, 2014) to 64.5% (Koessler et al., 2019) of people that reported to have previously ghosted a

partner themselves between 2014 and 2019. Ghosting rates in the online MDA context show that between 23% (Freedman et al., 2019) and 25.3% (LeFebvre et al., 2019) of users have experienced ghosting whereas between 21.7% (Freedman et al., 2019) and 29.3% (LeFebvre et al., 2019) reported to have previously ghosted someone.

While there is burgeoning research on ghosting frequency, the correlates of ghosting on MDAs have not systematically been studied. Preliminary findings suggest that being ghosted may have negative emotional and psychological outcomes (Freedman et al., 2019; Koessler et al., 2019; Pancani et al., 2021; Timmermans et al., 2021). More specifically, ghosting has been found to have detrimental outcomes for individuals' general self-esteem (e.g., Chung et al., 2002). Given that self-esteem is an important correlate of individuals' mental and physical health (e.g., Brechan & Kvalem, 2015) it seems pivotal to study the ways in which online relationship dissolution may affect their self-esteem. As such, this study aims to broaden sings of the consequences of being ghosted on MDAs on individuals' self-esteem. To better understand this relationship this study builds on existing research on the associations between offline interpersonal (romantic) relationships and well-being that draws on the Disillusionment Model (Huston et al., 2001) and the Expectancy Violations Theory (henceforth: EVT; Burgoon et al., 1976). As such, the current study will reflect on the role of disillusionment and expectancy violation to explicate.

The Mediating Role of Disillusionment

The disillusionment model (Huston et al., 2001) posits that in the early stages of establishing a relationship, individuals idealize their potential partner. More specifically, the model starts from the assumption that initially partners typically engage in impression management (i.e., highly favorable self-presentations). Moreover, individuals tend to focus on the virtues rather than the shortcomings of their dating partners in early stages of the relationship. However, as the relationship progresses, individuals may be faced with negatively perceived violations of their initial favorable impressions of the other person. Consequently, this may result in disillusionment or feeling disappointed in one's partner and/or relationship (Huston et al., 2001). In addition, individuals may also become disillusioned with oneself. Whereas other-oriented disillusionment captures feelings of other-oriented disappointment, the self-oriented disillusionment refers to self-oriented feelings of decreased self-perceived attractiveness, disappointment with oneself and decreased positive feelings towards oneself (Niehuis et al., 2020). Both other-oriented and self-oriented disillusionment have been found to correlate negatively with self-esteem (e.g., Murray et al., 2000).

Most research on disillusionment has focused on committed offline forms of relationships among established couples (e.g., marriage; Huston et al., 2001; Niehuis et al., 2019). No systematic evidence on the occurrence of disillusionment among individuals in relationships with varying levels of commitment (e.g., dating) in an online context exists. Moreover, given that early idealization of unknown interaction partners is a well-known feature of CMC (Walther, 2007), the assumptions of the disillusionment model seem to be particularly applicable in the context of mobile

dating even though this context is characterized by early stages of dating relationships. Recent findings, even though not directly fueled by the disillusionment model, provide initial support for the presence of disillusionment (Timmermans et al., 2021), feelings of responsibility and guilt (Pancani et al., 2021) after being ghosted on MDAs.

The Moderating Role of Expectancy Violations

Not all ghostees will experience self-or other oriented disillusionment to the same degree. The Expectancy Violations Theory (Burgoon & Jones, 1976) has the potential to define to which extent the Disillusionment Model holds for different individuals. The EVT posits that individuals have certain expectancies which refer to consistent patterns of predictable behaviors accompanying a particular relationship, context or individual. These expectancies are violated when someone's behavior deviates from the anticipated behavior in a given interaction (Afifi & Metts, 1998). The valence (i.e., the extent to which the violation is evaluated as positive or negative), expectedness (i.e., the extent to which the violation deviates from the range of possible anticipated behaviors) and importance (i.e., the impact of the violation on a given interpersonal relationship) of the violation influence the ways in which the one whose expectancies are violated will process the information and subsequently respond (Afifi & Metts, 1998). Consequently, depending on the valence, expectedness and importance of the violation the response to the relational transgressive event (e.g., disillusionment) may differ. Research on offline relationship dissolution and the EVT suggests that being unexpectedly and unwillingly romantically rejected relates to activation of the pain network in the brain (for a meta-analysis see Cacioppo et al., 2013). As such, the severity of individuals' expectancy violation may also offer an explanation for the extent to which individuals may feel disillusioned after being ghosted.

The Current Study

The current study aims to address a gap in the literature, namely the limited attention to relationship dissolution in the context of dating apps. A better understanding of relationship dissolution practices in a mobile space is important as literature on offline personal relationships suggests that individuals' self-esteem may diminish after a dating relationship is dissolved (e.g., Luciano & Orth, 2017). The mobile space might amplify romantic experiences and dynamics witnessed in offline settings. Unlike face-to-face interactions, individuals may more easily reject potential partners or withdraw from communication with them in a non-confrontational manner by deleting or blocking them or remaining unresponsive (Tom Tong & Walther, 2011).

Thus, while ghosting is expected to occur on MDAs through the casualization of intimacy no study has systematically assessed whether the ending of a relationship through withdrawal online (i.e., ghosting) forms a threat to individuals' self-esteem. For this reason, the current study will assess the association between being
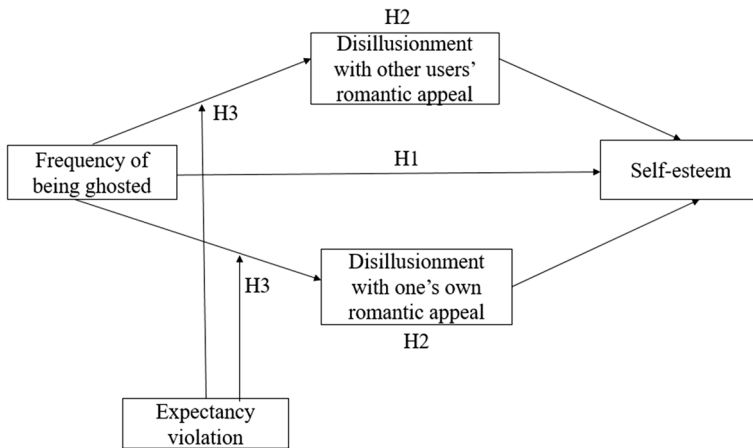
Fig. 1 Hypothesized model Note. Control variables are age, biological sex, sexual orientation and relationship status. Control variables and errors are not shown for clarity

ghosted online and self-esteem by drawing on the Disillusionment Model (Huston et al., 2001) to assess whether self-or other oriented disillusionment are underlying explanatory mechanisms for the possible association between being ghosted and self-esteem.

Moreover, it is theorized that the expectations with regards to interactions with a particular dating partner, may intensify or weaken the outcomes of relational dissolution. The EVT (Burgoon & Jones, 1976) is used to theorize individuals' susceptibility to disillusionment following being ghosted on MDAs.

To evaluate the expectations outlined above, the present cross-sectional study ($N=268$) examines an explanatory model on the links between being ghosted on MDAs, expectancy violation, disillusionment and self-esteem (see Fig. 1), testing the following hypotheses:

H1: Being ghosted on a MDA is negatively related to emerging adults' self-esteem.
H2: Being ghosted on a MDA is negatively related to self-esteem through disillusionment.
H2a: Being ghosted on a MDA is negatively related to self-esteem through disillusionment one's own romantic appeal..
H2b: Being ghosted on a MDA is negatively related to self-esteem through disillusionment with other users' romantic appeal.
H3 Expectancy violations regarding being ghosted moderate the relations between being ghosted and self-esteem through disillusionment.
H3a The negative relationship between being ghosted on a MDA and self-esteem through disillusionment with one's own romantic appeal will be stronger for those who perceived the ghosting as negative, impactful and unexpected.
H3b: The negative relationship between being ghosted on a MDA and self-esteem through disillusionment with others' romantic appeal will be stronger for those who perceived the ghosting as negative, impactful and unexpected.

Methods

Sample and Procedure

The study was approved by the university's Ethical Review Board. In April, 2021, Belgian 18–30 year olds were recruited through advertisements on social media (e.g., Facebook, Instagram). Respondents were assured that the survey would be processed confidentially and anonymously. Consent was obtained at the beginning of the online ca. 10–15 min survey. Five reward cards with a value of 20 euros were raffled off.

In total, the original sample existed of 650 respondents. An attention check was applied to ensure the highest data quality. Respondents who answered the attention check incorrectly ($n = 39$) or had missing data on this variable ($n = 92$) were excluded. Moreover, respondents who did not give active informed consent ($n = 57$) and were not current MDA users ($n = 194$) were redirected to the end of the survey and therefore not included in the analytical sample. The final analytical sample resulted in 268 current MDA users, $M_{years} = 23.17$; $SD = 2.52$, with a relative over-representation of females (68.7%). Moreover, 97.8% of respondents identified as Western-European and 74.3% identified as being exclusively heterosexual. In terms of relationship status, 92.2% reported not to be in a committed relationship at the time of completing the survey.

Measures

Socio-Demographic Variables

Age, biological sex (*0 = male, 1 = female*), relationship status and sexual orientation were questioned. Sexual orientation and relationship status were recoded into dummy variables (sexual orientation; *0 = heterosexual, 1 = non-heterosexual*; relationship status; *0 = in a committed relationship, 1 = not in a committed relationship*).[1]

General MDA *Use*

Respondents were asked whether they were a current MDA user (*0 = no, 1 = yes*). Only current users were included in this study and were asked which MDAs they were currently using and the frequency. With regard to frequency, respondents rated their general frequency of use, *almost never* (*= 1*) to *multiple times a day* (*= 7*), $M = 4.28$, $SD = 1.61$; daily frequency of use, *I check the MDAs that I use constantly throughout the day* (*= 1*) to *once a day less than 30 min* (*= 10*), and how long they

---

[1] The pre-data collection registration may be accessed on OSF through the following link: https://osf.io/kue96/?view_only=60ac9f1247d34a9cb819ad2e2cc11124

had been using MDAs for, *less than three months* (= 1) to *more than two years* (= 6), $M = 7.89$, $SD = 2.47$.

Frequency of Being Ghosted on MDAs

To measure MDA users' frequency of being ghosted by others on a MDA, an adapted single-item scale of Timmermans and colleagues (2021) was used in which respondents were presented with a definition of ghosting and subsequently asked how often they had been ghosted by other MDA users themselves, $M = 3.38$, $SD = 1.52$. In particular respondents received the following question: "Sometimes someone you like or with whom you have a nice conversation on a mobile dating application, suddenly breaks off all contact without explaining why. This is also known as the practice of ghosting. On mobile dating applications, you can easily start a conversation with someone you do not know. These conversations do not always go smoothly and sometimes they fade out. If both you and the other person do not mind the conversation fading out, it is usually not a matter of ghosting. With ghosting, the decision to break off contact only is made unilaterally and the one being ghosted may feel ignored and/or left with questions. Can you estimate how many times it has occurred that someone suddenly broke off all contact with you without explaining why?" Possible answers ranged from 1 (*never*) to 6 (*very often, by more than half of the people I meet on a MDA*), $M = 3.38$, $SD = 1.52$.

Mobile Dating App Disillusionment

Mobile dating app disillusionment was measured using two adapted sub-scales of the Tinder-based disillusionment scale (Niehuis et al., 2020). The first sub-scale measured disillusionment with one's own romantic appeal and included the following three items *When I used a mobile dating app in the past 6 months… I felt less positive about myself*; *I felt disappointed in myself*; *I no longer felt attractive*, with answers ranging from 1 (*never*) to 7 (*every day*). The second sub-scale measured disillusionment with other users' romantic appeal included the following three items *When I used a mobile dating app in the past 6 months… I felt disgusted with other users*; *I felt disappointed in other users*; *I started thinking it is impossible to find a romantic partner on a MDA* with answers ranging from 1 (*never*) to 7 (*every day*).

Principal component analysis extracted two factors. The first factor included the predefined items of the subscale disillusionment with one's own romantic appeal, eigenvalue = 3.3, explained variance = 54.93, α = 0.90). The second factor included the predefined items of the subscale of disillusionment with others' romantic appeal, eigenvalue = 1.16, explained variance = 19.29%, α = 0.72. Items of both subscales were averaged, i.e. disillusionment with one's own romantic appeal, $M = 2.55$, $SD = 1.5$; disillusionment with other users' romantic appeal, $M = 3.85$, $SD = 1.59$.

Expectancy Violations

The violated expectedness scale (Afifi & Metts, 1998) was used to measure the extent to which being ghosted violated respondents' expectancies, which captures

the expectedness, importance and valence of the violation. The scale included four items such as *Please indicate to what extent being ghosted on a MDA was surprising*. Items were rated on a 7-point scale ranging from 1 (*not at all*) to 7 (*completely*). Higher scores indicate a higher violation of expectancies. Principal component analysis showed that all items loaded on one factor in the overall sample, eigenvalue $= 2.81$; explained variance $= 70.11\%$; $\alpha = 0.86$. Items were averaged to compute a new variable expectancy violations, $M = 3.81$, $SD = 1.48$.

Self-Esteem

To measure self-esteem, the Single-Item Self-Esteem Scale (SISE; Robins et al., 2001) was used. The item asks respondents to indicate to what extent they (dis) agree with the following statement: *I have high self-esteem*, $M = 4.13$, $SD = 1.43$, on a 7-point Likert-type scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). Higher scores indicate higher self-esteem.

Data Analysis

Zero-order correlations and descriptive statistics were calculated. The final hypothesized model (Fig. 1) was analyzed using multivariate linear regression analysis in the PROCESS macro (Hayes, 2013) in the Statistical Software Package for Social Sciences (SPSS), while controlling for biological sex, sexual orientation, age and relationship status. 95% bias-correcting bootstrapped confidence intervals ($n = 5000$) were applied. The final dataset and syntax were uploaded on OSF.[2]

Results

Descriptive Statistics

Respondents used a MDA about once a week on average, $M = 4.28$, $SD = 1.61$, and about 1.5 to 2 h a day on average, $M = 7.89$, $SD = 2.47$. On average, respondents had been using MDAs for an active time period ranging between six and twelve months, $M = 3.82$, $SD = 1.89$). The majority of respondents used Tinder (96.6%; $n = 259$). In general, respondents reported to be ghosted by less than 10% of the people they had met on a MDA in the past six months, $M = 3.38$, $SD = 1.52$. Male respondents, $M = 3.85$, $SD = 1.58$ were ghosted (slightly) more frequently on a MDA than their female counterparts, $M = 3.16$, $SD = 1.44$, $t(266) = 3.48$, $p < 0.001$. Regarding the variables of interest for the analyses, skewness and kurtosis indicated a normal distribution (Kline, 2011). Zero-order correlations and descriptive statistics are provided in Table 1.

---

[2] Dataset and syntax can be accessed via this link: https://osf.io/d7562/?view_only=e1fa6b32ff8d45b 9bc13b8f755e61731

Table 1 Descriptive statistics and zero-order correlations

	M	SD	1	2	3	4	5	6	7	8	9
Age	23.17	2.52	–								
Biological sex	.69	.47	–064	–							
Relationship status	.92	.27	–00	–02	–						
Sexual orientation	.25	.44	–01	.00	–02	–					
Frequency of being ghosted	3.38	1.52	.02	**–21****	.01	.03	–				
Disillusionment with one's own romantic appeal	2.55	1.50	–04	–08	.01	–04	**.27****	–			
Disillusionment with other users romantic appeal	3.85	1.59	–01	**.14***	.04	.03	.09	**.48****	–		
Expectancy violations	3.81	1.48	.04	–04	.12	–03	.08	**.25****	.10	–	
Self-esteem	4.13	1.43	.04	**–21****	–01	–08	–03	**–31****	**–15***	–.10	–

Dichotomous variables are coded as follows: [a]Biological sex: male=0, female=1; [b]Relationship status: in a committed relationship=0, not in a committed relationship=1; [c]Sexual orientation: heterosexual=0, non-heterosexual=1

Bold values indicate the significant findings

*** $p < .001$; ** $p < .01$; * $p < .05$

Hypothesized Model

With regards to H1 (see Table 2), the model predicting *self-esteem*, controlling for biological sex, age, sexual orientation and relationship status was significant, $R^2 = 0.06$, $SE = 1.40$, $F(4, 258) = 3.74$, $p < 0.01$. After adding the frequency of being ghosted as predictor, the model was no longer significant; $\Delta R^2 = 0.01$, $SE = 1.40$, $F(1, 257) = 1.79$, $p = 0.18$. The analysis indicated that there was no direct association between the frequency of being ghosted and self-esteem, $B = -0.08$, $SE = 0.06$, $t = -1.34$, $p = 0.18$, $95\% CI$ [−0.19; 0.04]. No support for our first hypothesis was found (H1; see Table 2).

Mediating Role of Disillusionment

As for H2 (see Table 3), *disillusionment with one's own romantic appeal* and *disillusionment in other users' romantic appeal* were added as potential suppressive variables to the model to test for indirect associations between the frequency of being ghosted and self-esteem. The model was significant, $R^2 = 0.18$, $SE = 1.72$, $F(7, 255) = 7.96$, $p < 0.001$ (model 4; Hayes, 2013).

The frequency of being ghosted was significantly related to disillusionment in one's own romantic appeal, $B = 0.25$, $SE = 0.06$, $t = 4.13$, $p < 0.001$, $95\% CI$ [0.13; 0.37]. Disillusionment in one's own romantic appeal was significantly related to self-esteem, $B = -0.37$ $SE = 0.06$, $t = -5.74$, $p < 0.001$, $95\% CI$ [−0.50; −0.24]. These findings partially support H2a in that the frequency of being ghosted on a MDA was indirectly related to emerging adults' self-esteem through disillusionment with one's own romantic appeal, $B = -0.09$, $SE = 0.03$, $95\% CI$ [−0.16; −0.04].

The analysis further revealed that the frequency of being ghosted was not related to disillusionment in other users' romantic appeal, $B = 0.13$, $SE = 0.07$, $t = 1.96$, $p = 0.05$, $95\% CI$ [−0.00; 0.26], which in itself was also not related to self-esteem, $B = 0.07$, $SE = 0.06$, $t = 1.12$, $p = 0.26$, $95\% CI$ [−0.05; 0.18]. No indirect association between the frequency of being ghosted and self-esteem was found through disillusionment in other users' romantic appeal, $B = 0.01$, $SE = 0.01$, $95\% CI$ [−0.01; 0.03]. Hence, no empirical support was found for H2b For a detailed overview, see Table 3.

Moderating Role of Expectancy Violations

With regards to H3 (see Table 4), *expectancy violations* was added to the model to probe the indirect association which was found in testing H2. The model was significant, $R^2 = 0.19$, $F(9, 205) = 5.51$, $p < 0.001$. The results of the analysis (model 8; Hayes, 2013) indicated no interaction between the frequency of being ghosted and expectancy violations on self-esteem, $B = 0.00$, $SE = 0.05$, $t = 0.08$, $p = 0.94$, $95\% CI$ [−0.09; 0.10]. The interaction term between the frequency of being ghosted and expectancy violations significantly related to disillusionment with one's own

Table 2 Results of multiple linear regressions predicting self-esteem

Step 1:	B	S.E	t	p	95%CI
Age	.013	.03	0.38	.71	[-.06; .08]
Biological sex	**−66*****	.19	−3.53	< .001	[−1.03; −.29]
Sexual orientation	−29	.20	−1.47	.14	[−68; .10]
Relationship status	−08	.32	−0.25	.80	[−71; .55]
Step 2:	*B*	*S.E*	*t*	*p*	**95%CI**
Ghosting	−08	.06	−1.34	.18	[−19.; .04]

Dependent variable: self-esteem

Bold values indicate the significant findings

*** *p* < .001; ** *p* < .01; * *p* < .05

romantic appeal, $B = 0.17$, $SE = 0.05$, $t = 3.47$, $p < 0.01$, 95%CI [0.07; 0.27]. Conditional indirect significant relationships between the frequency of being ghosted and self-esteem through disillusionment with one's own romantic appeal emerged at moderate ($\pm 0SD$), $B = -0.10$, $SE = 0.04$, 95%CI [−0.19; −0.04] and high values of expectancy violations (+1SD), $B = -0.22$, $SE = 0.07$, 95%CI [−0.37; −0.10], but not at low values (−1SD), $B = -01$, $SE = 0.04$, 95%CI [−0.09; 0.08]. These findings support H3a in that the indirect association between the frequency of being ghosted on a MDA and self-esteem, through disillusionment with one's own romantic appeal, only occurs when one's expectancies with regards to being ghosted were (highly) violated.

No interaction between the frequency of being ghosted and expectancy violations was found in predicting self-esteem through disillusionment with other users' romantic appeal, $B = 0.00$, $SE = 0.05$, $t = 0.08$, $p = 0.94$, 95%CI [−0.09; 0.10]. For a detailed overview, see Table 4. All Tables are made available on OSF.[3]

Discussion

The present study broadens current understandings of digitized romantic identity exploration among emerging adults. More specifically, it explores the association between experiences of romantic rejection in an online context (i.e., being ghosted) and emerging adults' self-esteem. *The first aim* of the study was investigating the relationship between the frequency of being ghosted on a MDA and individuals' self-esteem. No direct relationship between how often emerging adults were ghosted on a MDA and their self-esteem was found (H1). This finding does not mirror previous findings suggesting a negative relationship between relationship dissolution and self-esteem in an offline context (e.g., Luciano & Orth, 2017). Although it was expected that online relationship dissolution would have similar associations with self-esteem to its offline counterpart, it may be possible that relationship dissolution

---

[3] Tables and figures on OSF can be accessed via this link: https://osf.io/d7562/?view_only=b0e266e9f238410eb20ef98d77d5f86e

Table 3 The mediating role of disillusionment with other users' and one's own romantic appeal

	Disillusionment with one's own romantic appeal					Disillusionment with other users' romantic appeal					Self esteem				
	B	S.E	t	p	95%CI	B	S.E	t	p	95%CI	B	S.E	t	p	95%CI
Age	−03	.04	−0.74	.46	[−10; .04]	−00	.04	−0.01	.99	[−08; .08]	.00	.03	0.11	.91	[−06; .07]
Biological sex	−11	.20	−0.57	.57	[−50; .28]	**.51***	.22	2.37	.02	[.09; .94]	**−79*****	.18	−4.32	<.001	[−1.15; −43]
Sexual orientation	−.17	.20	−0.84	.40	[−.58; .23]	.06	.22	0.27	.79	[−.38; .50]	−35	.19	−1.87	.06	[−72; .02]
Relationship status	.02	.33	0.07	.94	[−.63; .67]	.27	.36	0.75	.46	[−44; .97]	−09	.30	−29	.77	[−68; .50]
Ghosting	**.25*****	.06	4.13	<.001	[.13; .37]	.13	.07	1.96	.05	[−00; .26]	.01	.06	0.11	.91	[−.10; .12]
DisillSelf											**−37*****	.06	−5.74	<.001	[−50; −24]
DisillOther											.07	.06	1.12	.26	[−05; .18]

Bold values indicate the significant findings

*** $p < .001$; ** $p < .01$; * $p < .05$

Table 4 The moderating role of expectancy violation

	Disillusionment with one's own romantic appeal					Disillusionment with other users' romantic appeal					Self esteem				
	B	S.E	t	p	95%CI	B	S.E	t	p	95%CI	B	S.E	t	p	95%CI
Age	-03	.04	-.079	.43	[-10; .04]	.00	.04	0.03	.98	[-.08; .08]	.00	.03	0.07	.94	[-07; .07]
Biological sex	-10	.21	-0.46	.64	[-50; .31]	.73*	.23	3.18	<.01	[.28; 1.18]	**-80*****	.20	-3.97	<.001	[-1.20; -.40]
Sexual orientation	-10	.21	-0.47	.64	[-52; .32]	.18	.23	0.77	.44	[-.28; .64]	-37	.20	-1.83	.07	[-76; .03]
Relationship status	-28	.34	-0.84	.40	[-94; .38]	.06	.37	0.15	.88	[-.67; .79]	.05	.32	0.16	.88	[-58; .68]
Ghosting	-38	.21	-1.78	.08	[-79; 04]	-.38	.23	-1.63	.11	[-.84; .08]	.01	.20	0.03	.97	[-39; 40]
DisillSelf											**-37*****	.07	-5.14	<.001	[-52; -23]
DisillOther											.06	.07	0.84	.40	[-07; .18]
EV	**-41***	.20	-2.07	.04	[-.80; -.02]	-41	.22	-1.85	.07	[-84; .03]	-0.3	.19	-0.14	.89	[-40; .35]
Ghosting X EV	**.17*****	.05	3.47	<.001	[.07; .27]	**.14***	.06	2.48	<.05	[.03; .25]	.00	.05	0.08	.94	[-09; .10]
Ghosting—>DissillSelf—>Self–esteem											**B**	**S.E**			**95%CI**
EV – 1SD											-01	.04			[-09; .08]
EV ±0SD											**-10***	.04			[-19; -04]
EV + 1SD											**-22***	.07			[-37; -10]
Ghosting—>DisillOther—>Self–esteem															
EV – 1SD										-.00	.01				[-04; .02]
EV ±0SD										.01	.01				[-01; .04]
EV + 1SD										.02	.03				[-03; .08]

Bold values indicate the significant findings

*** p < .001; ** p < .01; * p < .05

in the form of withdrawal in an online context is not perceived as equally impactful as in an offline setting due to the gamification and depersonalization that takes place on MDAs (e.g., Van De Wiele & Campbell, 2019). These insights highlight the transformative nature of digital spaces for common social experiences.

The second aim of this study was to probe the association between the frequency of being ghosted on a MDA and individuals' self-esteem to explore individuals' underlying mechanisms in interpreting this experience of being ghosted on a MDA. In particular, the more frequently emerging adults were ghosted on a MDA, the more likely they were to become disillusioned with their own romantic appeal, which in turn correlated with decreases in their self-esteem (H2a). The results did not show significant differences between the frequency of being ghosted on a MDA and emerging adults' self-esteem through the disillusionment with other users' romantic appeal (H2b).

One potential reason as for why emerging adults seem to attribute the occurrence of being ghosted to themselves and not to the person who ghosted them, may be found in the heightened uncertainty resulting from the experience of being ghosted. Given the ambiguous and impersonal nature of ghosting as a form of romantic rejection, persons who were ghosted may lack closure on why the interpersonal connection was ended (Lefebvre & Fan, 2020). Such a sudden termination of contact by the ghoster may then heighten uncertainty with regards to the actual connection that they had with the ghoster (Pancani et al., 2021). Hence, it may be argued that ghostees will engage in retrospective uncertainty reduction (Berger, 1986), which would entail the process of analyzing the experience of being ghosted post-interaction and of reasoning explanations for the ghoster's behavior. Given the impossibility to communicate with the ghoster, the ghostee cannot be certain of why the other person ghosted them. In order to reduce this uncertainty, it is presumable that the ghostees will seek reasons within themselves as for why they were ghosted.

Another possible reason for the current findings may be found in emerging adults' pre-occupation with exploring their identity in a variety of life domains. Emerging adulthood has been referred to as the most self-focused time of life (Fincham & Cui, 2010), in which individual and independent decision making plays a pivotal role (Arnett, 2000). Consequently, emerging adults, arguably, feel highly responsible for the events that occur to them as they may perceive them as resulting from their own choices in life and therefore attribute the event of being ghosted to their own lack of romantic appeal rather than holding other users accountable. Self-blame likely surrounds these ghosting experiences. Particular attention should also go to which individuals are more likely to interpret ambiguous information negatively for example due to biased maladaptive cognitive processing style. For example, emerging adults who are socially anxious are known to interpret ambiguous online social experiences more negatively (Miers et al., 2020).

As different responses to ghosting were anticipated, *the third aim* of the current study was to explore individual differences in the extent to which respondents perceived the ghosting as negative, impactful and unexpected in nature (H3). The findings illustrate that the associations between the frequency of being ghosted, disillusionment with oneself and self-esteem were only significant, if emerging adults' expectancies with regards to being ghosted were highly or moderately violated, that

is, if they experienced being ghosted on a MDA as a (highly) negative, impactful and unexpected event (H3a). However, when emerging adults' expectancies with regards to being ghosted were not violated, no significant differences in disillusionment with their own romantic appeal were found. In line with the EVT (Burgoon & Jones, 1976), the extent to which disillusionment with oneself occurred was shown to depend on the extent to which one's expectancies had been violated. The results did not show significant differences between the frequency of being ghosted on a MDA and emerging adults' self-esteem through the disillusionment with other users' romantic appeal (H2b) at any level of expectancy violations (H3b). This finding is rather surprising as it does not support previous research on the disillusionment model, which found disillusionment with others occurred as the result of dashed initial favorable views of the other by someone's actual experiences with that person (e.g., Huston et al., 2001; Niehuis et al., 2019).

In short, although there was no direct relationship between how often emerging adults were ghosted on a MDA and their self-esteem, our results provide empirical support for indirect associations. As such, the current study found similar (rather small) effect sizes to those found in literature on offline relationship dissolution and global (trait) self-esteem (e.g., Luciano & Orth, 2017). These findings should be contextualized as this study was conducted in Belgium. Given the pervasiveness of liberal views regarding sexual and romantic practices in Belgium (e.g., Bernard et al., 2015), it may be argued that online relationship dissolution is being tolerated more in comparison to cultures with less permissive ideas on intimacy and commitment (e.g., India). In order to increase intersectionality and to attain a broader sense of the ways in which individuals across the globe are experiencing online relationship dissolution, it is recommended to explore these associations in a more culturally diverse context.

Theoretical and Practical Implications

In terms of theoretical implications, findings of the current study merely suggest a partial transferability existing theories on offline romantic relationships, specifically the Disillusionment Model (Huston et al., 2001) and the Expectancy Violations Theory (Burgoon et al., 1976). Accordingly, existing models seem not able to fully capture romantic experiences on MDAs, which suggests a need for (partially) rethinking these models for relationship formation in the digital society. Future research is encouraged to theoretically disentangle the transformative role of online communicative affordances (e.g., immediacy and frequency of interactions, amplification of experiences/demands) in emerging adults' interpersonal relationships (Nesi et al., 2018).

As MDAs do offer new social contexts with their own opportunities and challenges, which requires new skills from young people to successfully navigate them and to capitalize on the opportunities of MDAs in such a way that they can be supportive of romantic identity development. Literature on social media theorizes that social media literacy has an empowering role in moderating social media exposure effects and informing own social media behaviours (e.g., Schreurs & Vandenbosch,

2021). Given that MDAs are a particular form of social media, it is recommended to apply the insights of the current study to this specific context in the form of 'digital dating literacy'. Digital dating literacy can include at least the following two sub-components; (1) cognitive structures including sets of organized knowledge on dating app practices (e.g., ghosting) to manage expectations adequately and (2) affective structures consisting of sets of organized emotions in the users' memory which guide emotions in response to experiences on MDAs (e.g., being ghosted).

First, MDA users would benefit from realistic expectations with regards to online romantic interactions. More specifically, it may be useful to inform emerging adults about the ways in which CMC may shape interactions (e.g., asynchronous communication, peripheral decision making, anonymity). In the current study, almost all respondents were Tinder-users (96.6%), it should be emphasized that MDAs' technological infrastructure (i.e., features and functions) shape user activity and hence, the culture on a given platform or the platform-specific community norms; Ferris & Duguay, 2020). Providing insights on the prevalence rates of individuals being ghosted on different types of MDAs may help users to rationalize ghosting experiences and to shape their (platform-specific) expectancies with regards to the odds of being ghosted. This may empower individuals to not attribute the ghosting experience to one's own lack of romantic experience, but to external influences such as the type of dating platform. This information can be shared in media literacy workshops or highlighted in the context of relationship therapy.

Second, it is recommended to heighten awareness among emerging adults that ghosting someone (even if it is done without harmful intent) may be perceived by the other person as a highly negative, impactful and unexpected event, which may negatively impact their wellbeing and health romantic development. Insights from research on cyberbullying suggest that creating more empathy for victims may be helpful in preventing online bullying. Hence, educators are encouraged to divert attitudes of people who intend to ghost using a cognitive psychological approach (e.g., Mohan et al., 2019). Future research is encouraged to explore the effectiveness of such interventions to increase digital dating literacy.

Limitations and Future Directions

Although the current study has furthered our understanding of being ghosted, the study still has some limitations that need to be addressed and that provide direction for future research. The first limitation is the cross-sectional design which precludes making causal or temporal claims about the examined associations. Future research is encouraged to probe the directionality of the examined links. More specifically, it has been found that low self-esteem individuals may engage in certain behaviors (e.g., reading too much into problems) which may in turn distort relationship-enhancement processes (Murray et al., 2002). As such, it might be interesting to explore in which specific MDA behaviors low versus high self-esteem emerging adults engage and how these may be related to their likelihood of being ghosted on a MDA. Following this reasoning, individuals' self-esteem may be a predictor rather than an outcome of being ghosted on a

MDA. Moreover, users in our study indicated to be active on MDAs for on average six months to a year and appeared to be ghosted multiple times in this short time period. Therefore, future longitudinal research is also advised to document the potential cumulative indirect impact of ghosting experiences on users' self-esteem. A particularly interesting pathway for future studies is to explore whether emerging adults who have experienced being ghosted on MDAs more often or over a longer period of time, may become increasingly desensitized to its occurrence. Such links should be explored with longitudinal designs.

Second, the current study focused specifically on victims of ghosting, as such our understanding of actors of ghosting is still underexplored. Similar to what is seen in the context of cyberbullying, these two roles might actually be interrelated. Future longitudinal research may assess the likelihood to become a ghoster as an outcome of being ghosted. Unmet or violated romantic expectations have been related to decreased relationship quality (e.g., decreased relationship satisfaction) and stability (e.g., increased attractiveness of alternatives; Vannier & O'Sullivan, 2018). When the experience of being ghosted on a MDA does not align with individuals' romantic expectations, they may potentially start to adapt their expectations by attaching less worth to their online relationships. Consequently, it would be interesting to explore whether the experience of being ghosted may influence individuals' perception of injunctive peer norms with regards to engaging in ghosting behavior. If emerging adults perceive engaging in ghosting as seemingly normative in the realm of mobile dating, it may be valuable to explore whether their own tendency to ghost other users is reinforced.

Third, the current study found rather limited effect sizes, which may potentially be due to the operationalization of self-esteem in the current study (i.e., Single-Item Self-Esteem Scale; SISS; Robins et al., 2001). Even though single-item scales may have some shortcomings such as simplifying multidimensional topics and not being able to capture fine-grained differences between individuals, they may also have some advantages in particular contexts. Existing literature has demonstrated construct validity and robustness of the SISE (e.g., Leung & Xu, 2013). Given that the current study aimed to investigate individuals' global self-esteem (i.e., individual's positive or negative attitude towards the self as a totality) in relation to being ghosted, the SISE seemed an adequate measure in the current study. However, scholars have argued that self-esteem is domain-specific and hence, that individuals' self-esteem is contingent on outcomes in these particular domains. In order to attain a more nuanced view on which particular domains of self-esteem may be related to online romantic rejection, future research is encouraged to explore evaluations of the self in specific domains such as appearance and approval from others. As such, these contingencies of self-worth serve as an important self-regulatory role. Individuals are expected to pursue activities and situations in areas that influence their self-worth, which maximize their odds of achieving success and minimize their likelihood of failure (Crocker & Wolfe, 2001).

Lastly, the current study controlled for respondents' biological sex rather than their gender. Although this is a common practice in mobile dating research (for a systematic literature review see Konings et al., 2022), it has been criticized as

non-inclusive. More precisely, binary conceptualizations of sex/gender are not adequate for respondents who identity as non-binary (e.g., Cameron & Stinton, 2019). Hence, future research is encouraged to adopt a more inclusive approach in order to enhance representation in mobile dating research.

Conclusion

This study is among the first to explore correlates of relationship dissolution in an online context. The findings of this study suggest that the more often individuals are being ghosted on a MDA, the more they may become disillusioned with their own romantic appeal, which in turn may be detrimental for their overall sense of their self-worth (i.e., self-esteem). It should be noted that the aforementioned associations were only significant for individuals who perceived the ghosting as a negative, impactful and unexpected event. Given that self-esteem is crucial for individuals' overall functioning, including physical and mental health, educational and occupational attainment, and interpersonal success, these observations have several implications that should be taken into account. Overall, this study highlights the importance of exploring the ways in which digitalization may transform relational dynamics and may serve as a base for future studies to establish whether these findings hold over a longer period of time and whether interpersonal communication dynamics may be interfering.

Declarations

Conflict of interest The authors have no financial or non-financial conflicts of interest to declare that are relevant to the content of this article.

Ethical approval Ethical approval for this study was granted by the Social and Societal Ethics Committee of [blinded for review].

Informed consent Informed consent was obtained from all individual respondents included in the study.

References

Cameron, J. J., & Stinson, D. A. (2019). Gender (mis) measurement: Guidelines for respecting gender diversity in psychological research. *Social and Personality Psychology Compass, 13*(11), e12506. https://doi.org/10.1111/spc3.12506

Afifi, W. A., & Metts, S. (1998). Characteristics and consequences of expectation violations in close relationships. *Journal of Social and Personal Relationships, 15*(3), 365–392.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. https://doi.org/10.1037/0003-066X.55.5.469

Arnett, J. J., & Schwab, J. (2012). *The Clark University poll of emerging adults: Thriving, struggling, and hopeful*. Clark University.

Baxter, L. A. (1982). Strategies for ending relationships: Two studies. *Western Journal of Speech Communication, 46*(3), 223–241. https://doi.org/10.1080/10570318209374082

Berger, C. R. (1986). Uncertain outcome values in predicted relationships: Uncertainty reduction theory then and now. *Human Communication Research, 13*(1), 34–38. https://doi.org/10.1111/j.1468-2958.1986.tb00093.x

Bernard, P., Loughnan, S., Marchal, C., Godart, A., & Klein, O. (2015). The exonerating effect of sexual objectification: Sexual objectification decreases rapist blame in a stranger rape context. *Sex Roles, 72*(11–12), 499–508. https://doi.org/10.1007/s11199-015-0482-0

Birnholtz, J., Fitzpatrick, C., Handel, M., & Brubaker, J. R. (2014). Identity, identification and identifiability: The language of self-presentation on a location-based mobile dating app. In *MobileHCI 2014 - Proceedings of the 16th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services* (pp. 3–12). https://doi.org/10.1145/2628363.2628406

Blumenstock, S. M., & Papp, L. M. (2022). Romantic (versus other) events and momentary affect: Immediate and lagged within-person associations among college students. *Journal of Family Psychology, 36*(1), 57–68. https://doi.org/10.1037/fam0000885

Brechan, I., & Kvalem, I. L. (2015). Relationship between body dissatisfaction and disordered eating: Mediating role of self-esteem and depression. *Eating Behaviors, 17*, 49–58. https://doi.org/10.1016/j.eatbeh.2014.12.008

Burgoon, J. K., & Jones, S. B. (1976). Toward a theory of personal space expectations and their violations. *Human Communication Research, 2*(2), 131–146. https://doi.org/10.1111/j.1468-2958.1976.tb00706.x

Cacioppo, S., Frum, C., Asp, E., Weiss, R. M., Lewis, J. W., & Cacioppo, J. T. (2013). A uantitative meta-analysis of functional imaging studies of social rejection. *Scientific Reports, 3*(1), 1–3. https://doi.org/10.1038/srep02027

Chung, M. C., Farmer, S., Grant, K., Newton, R., Payne, S., Perry, M., & Stone, N. (2002). Self-esteem, personality and post traumatic stress symptoms following the dissolution of a dating relationship. *Stress and Health: Journal of the International Society for the Investigation of Stress, 18*(2), 83–90. https://doi.org/10.1002/smi.929

Collins, T. J., & Gillath, O. (2012). Attachment, breakup strategies, and associated outcomes: The effects of security enhancement on the selection of breakup strategies. *Journal of Research in Personality, 46*(2), 210–222. https://doi.org/10.1016/j.jrp.2012.01.008

Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108*(3), 593. https://doi.org/10.1037/0033-295X.108.3.593

Ferris, L., & Duguay, S. (2020). Tinder's lesbian digital imaginary: Investigating (im) permeable boundaries of sexual identity on a popular dating app. *New Media & Society, 22*(3), 489–506. https://doi.org/10.1177/1461444819864903

Fincham, F. D., & Cui, M. (Eds.). (2010). *Romantic relationships in emerging adulthood*. Cambridge University Press.

Freedman, G., Powell, D. N., Le, B., & Williams, K. D. (2019). Ghosting and destiny: Implicit theories of relationships predict beliefs about ghosting. *Journal of Social and Personal Relationships, 36*(3), 905–924. https://doi.org/10.1177/0265407517748791

Freedman, G., Powell, D. N., Le, B., & Williams, K. D. (2022). Emotional experiences of ghosting. *The Journal of Social Psychology*. https://doi.org/10.1080/00224545.2022.2081528

Garcia, J. R., & Reiber, C. (2008). Hook-up behavior: A biopsychosocial perspective. *Journal of Social, Evolutionary, and Cultural Psychology, 2*(4), 192–208. https://doi.org/10.1037/h0099345

George, A., & van den Berg, H. S. (2012). The influence of psychosocial variables on adolescent suicidal ideation. *Journal of Child & Adolescent Mental Health, 24*(1), 45–57. https://doi.org/10.2989/17280583.2011.620961

Hanson, K. R. (2021). Becoming a (gendered) dating app user: An analysis of how heterosexual college students navigate deception and interactional ambiguity on dating apps. *Sexuality & Culture, 25*(1), 75–92. https://doi.org/10.1007/s12119-020-09758-w

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. The Guilford Press.

Hobbs, M., Owen, S., & Gerber, L. (2017). Liquid love? Dating apps, sex, relationships and the digital transformation of intimacy. *Journal of Sociology, 53*(2), 271–284. https://doi.org/10.1177/1440783316662718

Huston, T. L., Caughlin, J. P., Houts, R. M., Smith, S. E., & George, L. J. (2001). The connubial crucible: Newlywed years as predictors of marital delight, distress, and divorce. *Journal of Personality and Social Psychology, 80*(2), 237–252. https://doi.org/10.1037/0022-3514.80.2.237

Kay, C., & Courtice, E. L. (2022). An empirical, accessible definition of "ghosting" as a relationship dissolution method. *Personal Relationships, 29*(2), 386–411. https://doi.org/10.1111/pere.12423

Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling. In M. Williams (Ed.), *Handbook of methodological innovation*. Thousand Oaks, Sage.

Koessler, R. B., Kohut, T., & Campbell, L. (2019). When your boo becomes a ghost: The association between breakup strategy and breakup role in experiences of relationship dissolution. *Collabra Psychology, 5*(1), 29. https://doi.org/10.1525/collabra.230

Konings, F., Sumter, S. R., Vranken, I., Dredge, R., & Vandenbosch, L. (2022). Behind the screens: A systematic literature review of quantitative research on mobile dating. *Archives of Sexual Behavior, 51*(6), 2969–3020. https://doi.org/10.1007/s10508-022-02312-9

Krüger, S., & Spilde, A. C. (2020). Judging books by their covers–Tinder interface, usage and sociocultural implications. *Information, Communication & Society, 23*(10), 1395–1410. https://doi.org/10.1080/1369118X.2019.1572771

LeFebvre, L. (2017). Ghosting as a relationship dissolution strategy in the technological age. In N. M. Punyanunt-Carer & J. S. Wrench (Eds.), *The impact of social media in modern romantic relationships* (pp. 219–235). Lexington Books.

LeFebvre, L. E., Allen, M., Rasner, R. D., Garstad, S., Wilms, A., & Parrish, C. (2019). Ghosting in emerging adults' romantic relationships: The digital dissolution disappearance strategy. *Imagination, Cognition and Personality, 39*(2), 125–150. https://doi.org/10.1177/0276236618820519

LeFebvre, L. E., & Fan, X. (2020). Ghosted?: Navigating strategies for reducing uncertainty and implications surrounding ambiguous loss. *Personal Relationships, 27*(2), 433–459. https://doi.org/10.1111/pere.12322

Leung, S. O., & Xu, M. L. (2013). Single-Item Measures for Subjective Academic Performance, Self-Esteem, and Socioeconomic Status. *Journal of Social Service Research, 39*(4), 511–520. https://doi.org/10.1080/01488376.2013.794757

Luciano, E. C., & Orth, U. (2017). Transitions in romantic relationships and development of self-esteem. *Journal of Personality and Social Psychology, 112*(2), 307–328. https://doi.org/10.1037/pspp0000109

Miers, A. C., Sumter, S. R., Clark, D. M., & Leigh, E. (2020). Interpretation bias in online and offline social environments and associations with social anxiety, peer victimization, and avoidance behavior. *Cognitive Therapy and Research, 44*(4), 820–833. https://doi.org/10.1007/s10608-020-10097-1

Mohan, S., Valsaladevi, I., & Thampi, S. M. (2019). Think Before You Post: A Cognitive Psychological Approach for Limiting Bullying in Social Media. In *Communications in Computer and Information Science* (Vol. 1122, pp. 418–434). Springer https://doi.org/10.1007/978-981-15-1301-5_33

Montgomery, M. J. (2005). Psychosocial intimacy and identity: From early adolescence to emerging adulthood. *Journal of Adolescent Research, 20*(3), 346–374. https://doi.org/10.1177/0743558404273118

Moore, P. (2014). *Poll Results: Ghosting*. Retrieved from https://today.yougov.com/ topics/ lifestyle/articles-reports/2014/10/28/ poll-results-ghosting

Murray, S. L., Holmes, J. G., & Griffin, D. W. (2000). Self-esteem and the quest for felt security: How perceived regard regulates attachment processes. *Journal of Personality and Social Psychology, 78*(3), 478–498. https://doi.org/10.1037/0022-3514.78.3.478

Murray, S. L., Rose, P., Bellavia, G. M., Holmes, J. G., & Kusche, A. G. (2002). When rejection stings: How self-esteem constrains relationship-enhancement processes. *Journal of Personality and Social Psychology, 83*(3), 556–573.

Nelson, L. J. (2021). The theory of emerging adulthood 20 years later: A look at where it has taken us, what we know now, and where we need to go. *Emerging Adulthood, 9*(3), 179–188. https://doi.org/10.1177/2167696820950884

Nesi, J., Choukas-Bradley, S., & Prinstein, M. J. (2018). Transformation of adolescent peer relations in the social media context: Part 1—A theoretical framework and application to dyadic peer

relationships. *Clinical Child and Family Psychology Review, 21*(3), 267–294. https://doi.org/10.1007/s10567-018-0261-x

Niehuis, S., Reifman, A., & Oldham, C. R. (2019). Effects of relational transgressions on idealization of and disillusionment with one's romantic partner: A three-wave longitudinal study. *Personal Relationships, 26*(3), 466–489. https://doi.org/10.1111/pere.12287

Niehuis, S., Reifman, A., Weiser, D. A., Punyanunt-Carter, N. M., Flora, J., Arias, V. S., & Oldham, C. R. (2020). Guilty pleasure? Communicating sexually explicit content on dating apps and disillusionment with app usage. *Human Communication Research, 46*(1), 55–85. https://doi.org/10.1093/hcr/hqz013

Pancani, L., Mazzoni, D., Aureli, N., & Riva, P. (2021). Ghosting and orbiting: An analysis of victims' experiences. *Journal of Social and Personal Relationships, 38*(7), 1987–2007. https://doi.org/10.1177/02654075211000417

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*(2), 151–161. https://doi.org/10.1177/0146167201272002

Schneider, F. M., Lutz, S., Halfmann, A., Meier, A., & Reinecke, L. (2022). How and when do mobile media demands impact well-being? Explicating the integrative model of mobile media use and need experiences (IM3UNE). *Mobile Media & Communication, 10*(2), 251–271. https://doi.org/10.1177/20501579211054928

Schreurs, L., & Vandenbosch, L. (2021). Introducing the social media literacy (SMILE) Model with the case of the positivity bias on social media. *Journal of Children and Media, 15*(3), 320–337. https://doi.org/10.1080/17482798.2020.1809481

Smith, A., & Anderson, M. (2016). 5 facts about online dating. Fact Tank, 29.

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin, 139*(1), 213–240. https://doi.org/10.1037/a0028931

Strugo, J., & Muise, A. (2019). Swiping for the right reasons: Approach and avoidance goals are associated with actual and perceived dating success on Tinder. *The Canadian Journal of Human Sexuality, 28*(2), 93–104. https://doi.org/10.3138/cjhs.2019-0010

Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior, 7*(3), 321–326. https://doi.org/10.1089/1094931041291295

Sumter, S. R., & Vandenbosch, L. (2019). Dating gone mobile: Demographic and personality-based correlates of using smartphone-based dating applications among emerging adults. *New Media and Society, 21*(3), 655–673. https://doi.org/10.1177/1461444818804773

Timmermans, E., & De Caluwé, E. (2017). Development and validation of the Tinder Motives Scale (TMS). *Computers in Human Behavior, 70*, 341–350. https://doi.org/10.1016/j.chb.2017.01.028

Timmermans, E., Hermans, A.-M., & Opree, S. J. (2021). Gone with the wind: Exploring mobile daters' ghosting experiences. *Journal of Social and Personal Relationships, 38*(2), 783–801. https://doi.org/10.1177/0265407520970287

Tom Tong, S., & Walther, J. B. (2011). Just say '"no thanks"': Romantic rejection in computer-mediated communication. *Journal of Social and Personal Relationships, 28*(4), 488–506.

Van De Wiele, C., & Campbell, J. F. (2019). From swiping to ghosting: Conceptualizing rejection in mobile dating. In A. Hetsroni & M. Tuncez (Eds.), *It Happened on Tinder* (pp. 158–175). The Institute of Network Cultures.

Vanden Abeele, M. M. P. (2021). Digital wellbeing as a dynamic construct. *Communication Theory, 31*(4), 932–955. https://doi.org/10.1093/ct/qtaa024

Vannier, S. A., & O'Sullivan, L. F. (2018). Great expectations: Examining unmet romantic expectations and dating relationship outcomes using an investment model framework. *Journal of Social and Personal Relationships, 35*(8), 1045–1066. https://doi.org/10.1177/0265407517703492

Walther, J. B. (2007). Selective self-presentation in computer-mediated communication: Hyperpersonal dimensions of technology, language, and cognition. *Computers in Human Behavior, 23*(5), 2538–2557. https://doi.org/10.1016/j.chb.2006.05.002

Authors and Affiliations

Femke Konings[1] [ID] **· Sindy Sumter[2] · Laura Vandenbosch[1]**

[1]   KU Leuven School for Mass Communication Research, Katholieke Universiteit Leuven, Leuven, Belgium

[2]   Amsterdam School of Communication Research, University of Amsterdam, Amsterdam, The Netherlands